

## WHAT IS CLAIMED IS:

1. A system for delivering multimedia content from a content provider, the system comprising:

a first Internet broadcasting network ("IBN"); and

a second IBN;

where the first IBN comprises:

a network operating center ("NOC");

an edge node;

a satellite communication link between the NOC and the edge node;

a last mile service provider directly connected to the edge node; and

an Internet user connected to the Internet through the last mile service

provider;

where the NOC receives multimedia content from the content provider and modifies the received multimedia content into a first streaming format and a format suitable for satellite transmission;

where the NOC transmits the modified multimedia content to the edge node using the satellite communication link; and

where the edge node delivers the modified multimedia content received from the NOC to the Internet user via the last mile service provider according to a second streaming format compatible with the first streaming format;

where the second IBN comprises:

duplicates of one or more of the NOC, the edge node, the satellite communication link, the last mile service provider, or the Internet user of the first IBN; and

simulations of one or more of the NOC, the edge node, the satellite communication link, the last mile service provider, or the Internet user of the first IBN for which

5 the second IBN does not comprise a duplicate;

where the second IBN is used to simulate the operation of the first IBN without interfering with the operation of the first IBN.

2. The system of claim 1, where the second IBN comprises:

a duplicate of the NOC of the first IBN;

a duplicate of the edge node of the first IBN;

a duplicate of the last mile service provider of the first IBN;

a duplicate of the Internet user of the first IBN; and

a simulation of the satellite communication link of the first IBN.

3. The system of claim 1, where the second IBN comprises:

a duplicate of the NOC of the first IBN;

a duplicate of the edge node of the first IBN;

a simulation of the last mile service provider of the first IBN;

a simulation of the Internet user of the first IBN; and

a simulation of the satellite communication link of the first IBN.

4. The system of claim 1, where the second IBN is contained in a portable enclosure.

5 5. The system of claim 1, where the performance of the first IBN is tested using the second IBN by injecting errors into signals received at the NOC of the second IBN.

6. The system of claim 1, where the performance of the first IBN is tested using the second IBN by injecting errors into signals received at the edge node of the second IBN.

7. The system of claim 1, where the performance of the first IBN is tested using the second IBN by injecting errors into signals received at the Internet users of the second IBN.

15 8. The system of claim 1, where the second IBN is used to simulate the delivery of content in the first IBN.

9. A method for testing a first Internet broadcasting network ("IBN") that delivers multimedia content from a content provider, where the first network comprises:

20 a network operating center ("NOC");  
an edge node;  
a satellite communication link between the NOC and the edge node;

a last mile service provider directly connected to the edge node; and  
 an Internet user connected to the Internet through the last mile service  
 provider;

where the NOC receives multimedia content from the content provider and  
 5 modifies the received multimedia content into a first streaming format and a format suitable for  
 satellite transmission;

where the NOC transmits the modified multimedia content to the edge  
 node using the satellite communication link; and

where the edge node delivers the modified multimedia content received  
 from the NOC to the Internet users via the last mile service provider according to a second  
 streaming format compatible with the first streaming format;

the method comprising:

providing a second IBN that comprises:

15 duplicates of one or more of the NOC, the edge node, the satellite  
 communication link, the last mile service provider, or the Internet user of the first IBN; and

simulations of one or more of the NOC, the edge node, the satellite  
 communication link, the last mile service provider, or the Internet user of the first IBN for which  
 the second IBN does not comprise a duplicate;                      simulating the operation of the first  
 IBN using the second IBN without interfering with the operation of the first IBN.

20 10. The method of claim 9, where the second IBN comprises:

a duplicate of the NOC of the first IBN;

- a duplicate of the edge node of the first IBN;
- a duplicate of the last mile service provider of the first IBN;
- a duplicate of the Internet user of the first IBN; and
- a simulation of the satellite communication link of the first IBN.

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11. The method of claim 9, where the second IBN comprises:

- a duplicate of the NOC of the first IBN;
- a duplicate of the edge node of the first IBN;
- a simulation of the last mile service provider of the first IBN;
- a simulation of the Internet user of the first IBN; and
- a simulation of the satellite communication link of the first IBN.

12. The method of claim 9, where the second IBN is contained in a portable enclosure.

13. The method of claim 9, where the simulating of the operation of the first IBN comprises injecting errors into signals received at the NOC of the second IBN to test the performance of the first IBN.

14. The method of claim 9, where the simulating of the operation of the first IBN comprises injecting errors into signals received at the edge node of the second IBN to test the performance of the first IBN.

15. The method of claim 9, where the simulating of the operation of the first IBN comprises injecting errors into signals received at the Internet user of the second IBN to test the performance of the first IBN.

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16. The method of claim 9, further comprising monitoring the second IBN to detect quality degradation in the first IBN.

17. The method of claim 9, further comprising monitoring the second IBN to detect quality degradation in the first IBN.